Identification Criteria for Boundary Regions

Cusp

- mixture of magnetosheath and magnetospheric plasma
- 'dc' magnetic field depression
- low-frequency, broadband electrostatic noise

Mantle

- magnetosheath-like plasma with ion spin-modulation on magnetospheric side of the magnetopause
- relatively steady magnetospheric magnetic field

Entry Layer

- enhanced low-energy magnetosheath-like ion energy with little or no spin modulation
- relatively steady magnetic field orientation

Magnetopause

• Magnetic field rotation from predominantly magnetospheric orientation to variable magnetosheath values combined with change in plasma spectra